

Pre-eclampsia linked to thyroid problems

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Women who develop pre-eclampsia during pregnancy are more likely than other women to have reduced thyroid function (hypothyroidism), finds a study published in *BMJ* today. It may also put women at a greater risk of thyroid problems later in life.

Pre-eclampsia is a serious condition where abnormally high blood pressure and other disturbances develop in the second half of pregnancy. [Hypothyroidism](#) is caused by insufficient production of hormones by the thyroid gland.

Although the exact cause of pre-eclampsia is still unclear, studies suggest that certain proteins may be responsible. Levels of these proteins rise during the last two months of normal pregnancy and increase to very high concentrations in [women](#) with pre-eclampsia. Studies also suggest that women with a history of pre-eclampsia have an increased risk of future cardiovascular and kidney (renal) disease.

So a research team based in the United States and Norway compared [thyroid function](#) in women who developed pre-eclampsia during pregnancy with those whose blood pressure remained normal. They also tested whether pre-eclampsia in a previous pregnancy was associated with risk of reduced thyroid function in later life.

Their findings are based on thyroid function tests from 140 healthy pregnant women taking part in a US trial who developed pre-eclampsia, 140 matched controls in the same trial who did not develop pre-eclampsia, and 7,121 women in a Norwegian study who were monitored

for around 20 years after their first pregnancy.

In the US study, levels of thyroid stimulating [hormone](#) measured just before delivery were twofold higher in women who developed pre-eclampsia during pregnancy compared with those who did not.

This was strongly associated with excess levels of a particular protein (tyrosine kinase), which plays a key role in the [pathogenesis](#) of pre-eclampsia.

In the Norwegian study, women who developed pre-eclampsia in their first pregnancy were more likely than other women to have high concentrations of thyroid stimulating hormone many years after the pregnancy. The association was particularly strong if pre-eclampsia had occurred in two pregnancies.

The authors conclude that women who develop pre-eclampsia are at a greater risk of hypothyroid function during their [pregnancy](#) and women with a history of pre-eclampsia are at greater risk of hypothyroid function many years later.

These findings could have important implications for the subsequent care of women with pre-eclampsia, they add. Not only should they be followed closely for the development of cardiovascular and renal disease, but consideration should also be given to monitoring for the development of reduced [thyroid](#) function and clinically important hypothyroidism.

Treatment might also prevent early cardiovascular disease in women with a history of pre-eclampsia, they say.

Source: British Medical Journal ([news](#) : [web](#))

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